BRAZIL

SECTOR:	Energy
PROJECT NAME:	North-South Electric Power Interconnection (1051/OC-BR)
TOTAL COST:	$936 million
FINANCING:	
IDB	$307 million
OTHER	$300 million
LOCAL	$329 million
DATE OF APPROVAL:	November 5, 1997

GENERAL DESCRIPTION: The objective of this project is to meet the demand for electric energy from electric utilities at the lowest possible economic cost by linking the two major electric power systems in the country, which are not interconnected at present.

The investment component consists of: (a) the 1030-km North-South Interconnection line, which will link the Imperatriz substation in the state of Maranhão with the Serra da Mesa substation in the state of Goiás, plus the 249-km long Serra da Mesa-Samambaia section; and (b) construction of three new substations, one each in the municipalities of Gurupi, Miracema and Colinas in the state of Tocantins, and expansion of the substations of Samambaia, Serra da Mesa, Imperatriz and Presidente Dutra, and Marabá.

The institution-strengthening component has three subcomponents: (a) support to the establishment of ANEEL; (b) an update of the inventory of hydroelectric projects; and (c) strengthening of the sector?s environmental management.

CONSULTANTS: Consultants will be hired to undertake the following activities: (a) engineering work for the development of the line and substations, which includes precommissioning electrical studies, detailed analyses for specifications for the installatin of the compensation equipment, and specialized detail engineering investigations to complete the designs of the substations, adjust the parameters of the system, and define the electrical limits between subsystems for recalibration of shielding; (b) technical supervision; (c) environmental supervision; (d) administration; (e) institutional strengthening; and (f) performance studies. Under the first component, consultants would be contracted for development of the line and substations. This includes the precommissioning electrical studies, detailed analyses for specifications for the installation of the compensation equipment, and specialized detailed engineering investigations to complete the designs of the substations, adjust the parameters of the system, and define the electrical limits between subsystems for recalibration of shielding.

The second component involves supervision and inspection of the manufacturing of the principal equipment and site supervision and inspection

of the works. It also includes coordinating the work between the procurement offices and preparation of working designs with the site construction offices, in addition to supervision of the requisite studies.

The third component entails supervision of the execution of the environmental mitigation and compensation programs.

The fourth component involves providing administrative, accounting and legal support.

The component for institutional strengthening comprises the activities for the strengthening of ANEEL, the update of the inventories of hydroelectric projects, and the strengthening of environmental management.

The last component consists of studies for the expansion of transmission and the identification of new projects.

GOODS AND EQUIPMENT: The following will be purchased: capacitor banks, switching equipment, control, safety and communications equipment, conductors, optical fiber ground wire (OPGW), current and voltage transformers and lightning arresters, reactors and voltage transformers, and line structures.

CIVIL WORKS: The following civil works will be financed: (a) installation of transmission lines; (b) construction of three substations; (c) additions to five substations; and (d) the installation of two controllable series compensator banks.

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